

Introduction

Automatic Call Distribution (ACD) distributes incoming calls to agent positions in the same ACD queue.

The ACD Load Management system lets customers adjust the ACD configuration to respond to changing traffic loads. The supervisor's digit display and the printed ACD Management Reports provide insights into the load situation.

Document overview

This document describes the ACD load management commands that supervisors can use to tailor the system to meet changing needs.

This document also describes the optional Management Report package, listing available management reports and providing the inputs for requesting reports. The ACD Management Reports feature provides the ACD customer with timely and accurate statistics relevant to the ACD operation so the customer can monitor changing ACD traffic loads and implement corrective action when required.

Operational overview

Each ACD customer can designate one supervisor position as a Senior Supervisor equipped with a Teletypewriter (TTY) or Video Display Terminal (VDT) for Management Report functions or ACD Management functions.

With the TTY or VDT, the senior supervisor can do the following:

- reassign auto-terminating ACD trunk routes
- reassign ACD agent positions to other ACD Directory Numbers (DNs)
- redefine the ACD Night Forwarding number
- reassign an ACD agent position to another supervisor
- assign priority or nonpriority status to ACD trunks
- set the timers and routes for first and second Recorded Announcements (RAN)
- specify a Night RAN route
- set the Target answer time **T** used to calculate the Telephone Service Factor (TSF)
- define the target queues for Automatic Overflow
- define the Overflow thresholds
- define the Interflow digits
- allow 1200 agent positions per ACD DN on NT and XT machines
- query the existing values for any of the above

Other documentation

For a complete description of the ACD system and features, refer to the *Automatic Call Distribution feature description (553-2671-110)*. For overlay and system message information, including error codes, refer to *X11 input/output guide 553-3001-411*.

For ACD error codes, refer to *X11 input/output guide 553-3001-411*.

Accessing the command mode

Before issuing load management or report commands, the senior supervisor must enter command mode by following these steps.

- 1 Type **\$ L** from the senior supervisor's display.

The system responds with a prompt (**>**) indicating that it is ready to receive further commands.

- 2 Enter new data on the same line as the prompt, and press the carriage return key.
- 3 To query existing values, enter an ACD Management command.
- 4 Input new data if desired, or press the carriage return if no change is necessary.

If there are any changes in a line, all data must be retyped.

- 5 To exit the ACD Management command mode, use the **\$ L**.

With the proper VDT or TTY equipment, *any* supervisor can enter the ACD Management command mode to view existing parameters. The system prints the values but does not display the prompt or allow further input.

Management reporting commands

If the ACD has the ACD Management Reports feature, any current report display aborts when the **\$ L** command is entered.

After the senior supervisor inputs a management reporting command, the system prints the current parameters associated with the command, followed by a double dash to indicate that the system is ready for input.

Selecting print options

The Select Print (SPRT) command lets the senior supervisor specify which management reports to print. The format for this command is as follows:

SPRT vwxy VWXY

where:

v, w, x, and y are the reports to be printed:

1 for the Agent Group Report

2 for the Queue Report

3 for the Trunk Routes Report

4 for the Agent Position Report

Scheduling periodic reports

The Select Schedule (SSCH) command lets the senior supervisor define a schedule for periodic Management Reports. (LD 23 also permits report scheduling.) The format for the command is as follows:

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SSCH sd sm ed em SD SM ED EM
sh eh s SH EH S
d d d d d d d D D D D D D D
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where:

sd = the starting day (1–31)
 ed = the ending day (1–31)
 sm = the starting month (1–12)
 em = the ending month (1–12)
 sh = the starting hour (0–23)
 eh = the ending hour (0–23)
 s = the schedule code

- 0 No reports are printed.
- 1 Reports are printed hourly on the hour.
- 2 Reports are printed every hour on the half-hour.
- 3 Reports are printed every half-hour.
- 4 Report 3 is printed every quarter-hour. No other reports are printed.
- 5 Report 3 is printed every quarter-hour. Other reports can be printed hourly on the hour.
- 6 Report 3 is printed every quarter-hour. Other reports can be printed hourly on the half-hour.
- 7 Report 3 is printed every quarter-hour. Other reports can be printed every half-hour.

d = Days of the week when reports are to be printed:

1 = Sunday	5 = Thursday
2 = Monday	6 = Friday
3 = Tuesday	7 = Saturday
4 = Wednesday	

Report Control

The ACD Report Control feature allows every ACD DN or control DN (CDN) to control report generation, including reports generated on the Meridian 1 (ACD-C) or by an auxiliary processor (ACD-D or ACD-MAX). Report Control only works with Meridian Mail SP8.

This feature eliminates the Virtual Agent Compatibility feature, introduced in X11 Release 12, which did not allow the messages to be sent to ACD-D or ACD-MAX systems for virtual ACD DNs. The following three applications use Virtual Agent ACD groups:

- Integrated Voice Messaging System (IVMS)
- Data Services
- Meridian Mail

During conversion to X11 Release 17 from any earlier Release, set RPRT to NO for the above ACD DNs. Virtual agent reporting is unavailable on ACD-D or ACD-MAX before X11 Release 4.

This option includes Package C reports, ACD-D reports, and ACD-MAX. For a complete discussion of ACD-D and ACD-MAX reporting, see the associated documents listed earlier in this section.

An example: Reports 1, 2, 4, and Daily Totals show 10 ACD DNs. If two ACD DNs have RPRT = NO, then the total ACD DNs in Reports 1, 2, 4, and Daily Total shows 8 ACD DNs instead of 10 ACD DNs.

Operating parameters

When making the decision to turn reporting on or off, take into account the interactions among ACD DNs and CDNs through call redirection and load management. *Do not switch the reporting control on and off, as toggling between options generates inaccurate report information.* If you need to change the report status, change the option at the end of a reporting period.

Management command conventions

- With DN Expansion (DNXP) equipped, ACD DN's can be up to seven digits.
- ACD Position ID (POS ID) identifies an agent position.
- Access code (ACOD) and member number (MEM) identify trunk number routes.
- Queues are identified by ACD DN.
- When a CDN is specified for any of the management commands, the system outputs “** CDN **”.

Enhanced ACD Routing (EAR)

Enhanced ACD Routing (EAR) lets the system treat different calls differently, as described in *Automatic Call Distribution feature description* (553-2671-110).

A Control DN (CDN) is a special Directory Number not associated with any physical telephone or equipment that specifies a destination ACD DN to which incoming calls are directed. Multiple CDNs can place calls into the same ACD queue. The parameters of the CDN, not those of the ACD queue, determine call treatment.

The following ACD Management commands are used for CDN default operation:

- FRRT First RAN route
- FRTT First RAN route time
- SRRT Second RAN route
- SRTO Second RAN route time option

The following commands are supported for a CDN:

- SRTA Select Route and Trunk Assignment. This is used to assign the terminating ACD DN for an auto-terminating ACD trunk. A CDN can be used as a valid auto-terminating ACD DN.
- IFDN Interflow DN assignment. A CDN can be used as a valid Interflow DN of an ACD DN, but the CDN itself cannot have an Interflow DN.
- NITE Night Forwarding number assignment. A CDN can be used as a valid Night Call Forward DN of an ACD DN, but the CDN itself cannot have a Night Call Forward DN.
- DTOT Daily Totals. This presents a Daily Totals Report for CDNs based on a schedule block and not on a per CDN or ACD DN basis.
- STOT System Totals. This presents a System Totals Report for CDNs based on a schedule block and not on a per CDN or ACD DN basis.

A new set of commands are added to support the CDNs on the system. A new print command is Print CDN Parameters and Options (PCPO). The new parameters for the PCPO command are listed below and are covered more thoroughly in the PCPO section.

- DFDN Local default ACD DN for the CDN
- CEIL Call ceiling value for the CDN

When the senior supervisor enters the above commands for a CDN, the system appends the term “** CDN **” to the command to tag the entry as a CDN.

For example,

FRRT 8976

appears as

FRRT 8976 ** CDN **

Customer Controlled Routing (CCR)

Customer Controlled Routing (CCR) enables the customer to customize the treatment and routing of incoming calls through a user-friendly interface. Under normal circumstances, calls arriving at a CDN in the controlled mode have their handling determined by a customer-defined script executed by the CCRM application, rather than being handled by the X11 software. Refer to the documents listed at the beginning of this section for further information.

The following ACD Management commands are supported if CCR is equipped and the CCRM application is controlling the CDN:

- TLDA Calls Waiting threshold (CWTH)
- TLDB Busy threshold (BYTH)
- TLDC Overflow threshold (OVTH)
- TSFT Telephone Service Factor (This allows the supervisor to change the threshold for calculating the TSF for the CDN.)
- CNTL Set Controlled mode

CCR Management Reporting

The CCR feature affects customers with Management Reporting capabilities:

Report 1: Agent Group Report In the ACD-DN report for Report 1, the fields CALLS ANSWD and ASA are affected by the CCR feature only if the CCR calls are answered in the ACD queues, and the queues are responsible only for the time the calls spent in the queues.

Report 2: Queue Report Calls placed in more than one ACD queue to await an available agent are pegged against the ACD DN in which the call is answered. The wait time includes the time the call waited in the reporting ACD DN, not the accumulated time spent in all queues. For a CDN in Report 2, only three fields are used: CALLS ACCEPT, BUSY, and DEFAULT DN.

Reports for ACD DN — Multiple-queued calls do not affect the ACD queues' statistics *unless* the calls were answered in the queues. The two fields added to the Queue Report for CCR are ROUTE TO and DISC.

Reports for CDNs — All fields described for CDNs apply to CCR.

Ongoing Status Display If the EAR feature has been implemented, CDNs are not included in the Ongoing Status Display. All calls coming into the CDN route to the default ACD DN immediately. If the CCR feature is used, the Ongoing Status Display reports both ACD DN and CDNs for the customer. CDNs have values in the TSF, ASA, and # CALLS IN QUEUE fields. All other fields contain asterisks indicating they do not apply to the CDN.

Agent ID option

This feature provides the ACD customer with the option of operating in either an Agent ID mode or a Position ID mode. If the Agent ID option is selected, ACD agents must enter a four-digit Agent ID code (range 0001 to 9999) before access is allowed to ACD features. This is part of the ACD telephone login procedure that must be performed before access to ACD features is allowed. Statistical performance data continues to be accumulated on a Position ID basis. However, the Agent ID code of the agent who used the particular agent position is reflected in the management reports.

ACD set login

An agent's or supervisor's telephone cannot receive any ACD calls until an agent logs in to that telephone by pressing the In Calls key on the telephone. The system ignores the key if no headset or handset is connected.

- If the Agent-ID option is not defined, the LED associated with the NOT-READY key LED illuminates and the telephone digit display shows the ACD DN and supervisor position. The telephone is accumulating time and the agent can access all ACD features.
- A special dial tone appears if the Agent-ID option is defined. The agent must key in the four-digit Agent-ID code on the telephone dial pad. The system validates the digits and returns one of the following tones:
 - Overflow tone if the code is not input before normal digit timeout, or the code is invalid or out of range.
 - Busy tone if another individual is already logged in with the same Agent-ID code.

A valid code gives the agent access to ACD features.

Note: The configuration record specifies the maximum number of agents who can be logged in to the system at any one time (prompt MAGT in LD 17). An agent who exceeds this threshold by trying to login will receive an overflow tone.

500/2500 telephone login protocols

Since the 500/2500 telephones do not have key lamps, the agent logs in and joins the idle agent queue by going off hook and entering the SPRE code plus 97. The agent can also login by entering the SPRE code plus 97 and the four-digit Agent ID number, and then by going off hook. To logout, the agent reenters the SPRE code plus 97, and goes on hook.

A special logged-in tone lets the agent know when the telephone is in the agent queue. Before logging in and after logging out the agent hears the normal dial tone.

The login and logout commands clear the Not Ready mode. If the agent is not logged in, the Not Ready mode cannot be activated.

Data Agent login

Data Agents can press the Make Set Busy (MSB) key to login after ascertaining that the Data Shift key is lit on the Add-on Data Module (ADM) associated with that agent position. The correct Class of Service (COS) must be defined for this feature in LD 11.

ACD telephone logout

Before logging out, the agent should check to see if any calls are active or on hold (see “Walkaway/Return” on page 13).

Removing the headset/handset from a telephone that is currently logged in to the ACD operation terminates access for agents who have the option of using headset/handset removals or activating the Make Set Busy key. Agents who do not have this option can log out using the Make Set Busy key, unless this key is unavailable. Pressing Make Set Busy causes immediate logout unless there is an active call on the In Call key, in which case logout occurs when the call is disconnected.

After an agent logs out,

- The agent position is removed from the ACD agent queue.
- Beginning with X11 Release 19 for ACD packages C and D, systems with a display show a “LOGGED OUT” message if the Make Set Busy key has been deactivated.
- All timing for that position stops.

Data Agent logout

Data Agents can press the Make Set Busy (MSB) key to logout after ascertaining that the Data Shift key is lit on the Add-on Data Module (ADM) associated with that agent position. The correct Class of Service (COS) must be defined for this feature in LD 11.

Walkaway/Return

An agent who is logged in can briefly leave the position, then return and resume normal operation without logging in again. (If the agent disconnects by merely unplugging the headset or handset from the telephone, the Walkaway/Return feature is not activated.)

Removing the headset/handset under any condition other than those listed here logs out the agent. These are the Walkaway procedures:

- **Direct Call-Processing (DCP) phase (In Calls LED lit)** During this operation, the agent is connected with a caller. Before removing the headset/handset, the agent presses the Hold key, causing the In Calls LED to flash at 120 ipm and initiating Walkaway.
- **Post Call-Processing (PCP) phase (NOT READY LED lit)** During this operation, the agent and the caller are disconnected. When the agent presses the Hold key, the Not Ready LED flashes at 120 ipm. Removal of the headset/handset initiates Walkaway.
- **Non-ACD call-handling phase (DN LED lit)** A non-ACD call is connected to the agent position. The agent presses the Hold key to keep the call connection, and the DN LED flashes at 120 ipm, permitting Walkaway.

Timing continues during Walkaway, accumulating in the category that was active before Walkaway.

If the supervisor has corresponding agent keys, they flash 120 ipm for Walkaway.

- No lamp for MSB
- Steady lamp for Busy on In-Calls
- Slow flash for waiting for a call
- Fast flash for DN calls

Note: If the incoming caller disconnects from an on hold In Calls or DN key, the telephone reverts automatically to the Not Ready state and the Not Ready LED flashes. The timing for the prior state stops, and PCP timing starts.

When an agent or supervisor returns to an agent position that is in the Walkaway mode and plugs the headset/handset into the telephone, the normal operation of ACD features resumes.

Agents using DN keys

Activating any DN key lights the associated LED indicator lamp and gives a dial tone. An incoming call to that DN causes the LED indicator to flash and the agent telephone to ring. This assumes that any and all agents on a queue basis are permitted to use DN keys, or the agent is already logged in. If the agent is not permitted to use DN keys when not logged in, the LED for incoming DN calls flashes. However, the agent is not able to answer the calls until logged in to the queue.

Alternate Call Answer

The Alternate Call Answer feature allows the customer to choose, on a per queue basis, if ACD calls should be blocked for an agent set with an IDN call on hold. For complete information, see *Automatic Call Distribution feature description* (553-2671-110).

In Report 1, if an agent answers an ACD call while an IDN call is on hold, the time for the ACD call shows as AVG DCP instead of AVG TIME.

In Report 4, if an agent answers an ACD call while an IDN call is on hold, the time for the ACD call shows as AVG DCP instead of INC TIME or OUT TIME.